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(54) Title: USE OF COX-2 INHIBITOR TO PREVENT T-CELL ANERGY INDUCED BY DENDRITIC CELL THERAPY

(57) Abstract: The present invention relates to a method and combination therapy useful in the treatment of cancer. More specifi-
cally, the invention relates to the use of COX-2 inhibitors in combination with a therapeutic dendritic cell vaccine for treating cancer.
The COX-2 inhibitors of the present invention are believed to inhibit the enzymatic activity of prostaglandinE₂ (PGE₂); thereby
preventing COX-2 overexpressing tumors from evading immune surveillance by antigen-specific cytotoxic T lymphocytes (CTLs).
COX-2 inhibitors are believed to suppress PGE₂ that COX-2 overexpressing glioma produce, allowing tumor-infiltrating DCs to
polarize Th cells toward Th-subset-1 (Th1).



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